



TERNTANK

Shipping, Chartering & Ship Management

HYBRID  SOLUTION

OUR NEXT GENERATION FLEET



LNG AS FUEL - BACKGROUND AND OUTCOME

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Background



- Our goal was reduced emissions and reduced environmental footprints
- Our aim is always to reduce the consumption.
- Our strategy was developing further environmentally friendly supply chains for our customers
- Based on the above we ordered our 4 LNG driven Oil/Chemical tankers in 2014. These were delivered in 2016 and has been in operation since then.



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Outcome



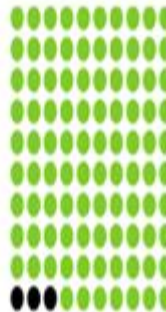
- All emissions reduced
- Consumption reduced, a big advantage is the energy value for LNG
- The vessels have attracted our customers. We ordered the ships without Time Charter, yet they have been in Time Charter since delivery.
- Our dual fuel LNG driven vessels has been operating on LNG since they arrived to Europe in beginning of 2017.

EMISSION & NOISE REDUCTION

99% LESS
SO_x



97% LESS
NO_x



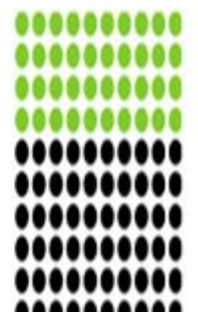
40% LESS
CO₂



99% LESS
PARTICLES



40 % LESS
NOISE



Outcome



- Of course we have also had some running-in problems, but it has not been so much:
- One was the design of fuel gas system which resulted in too big capacity of the LNG pump.
- One problem was that the temperature of cylinder liners raised very quickly which caused the cylinder oil to burn.
- We have had full support from the manufacturers both in terms of solving this technically and financially.



Outcome



- The vessels has now been running on LNG since delivery (5 years)
- No guarantee dockings, Not many hours for off-hire and lowest OPEX costs year after year within our company.
- For our crew it is a very good working enviroment onboard.
- We have been running also on LBG.
- We have ordered two more vessels which will be delivered later this year.





Thank You

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